

Neonatal Umbilical Myiasis: Case Report

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ABSTRACT

Myiasis is the infestation of live human and vertebrate animals with larvae (maggots) of flies from the order Diptera, which feed on the host's dead or living tissue, liquid body-substance or ingested food¹. A higher incidence of myiasis is found in rural tropical and subtropical areas. Animals are most commonly infested, but occasionally humans, especially those who are ill and incapacitated, can suffer from myiasis. This is a rare disease in neonates. Only a few reports have been published in the literature about this condition. Umbilical myiasis is extremely rare. Only few cases of umbilical myiasis have been reported.

INTRODUCTION

Myiasis is the infestation of live human and vertebrate animals with larvae (maggots) of flies from the order Diptera, who feed on the host's dead or living tissue, liquid body-substance or ingested food¹. Myiasis can affect cutaneous tissue, body cavities and body organs²⁻³.

A higher incidence of myiasis is found in rural zones, especially in tropical and subtropical areas of Africa and America. Animals are most commonly infested, but occasionally humans, especially those who are ill and incapacitated, suffer from myiasis¹. This is a rare disease in neonates. Only a few reports have been published in the literature about this condition.

CASE REPORT

A full-term male child, who was born to a primigravida mother via spontaneous vaginal delivery. The child was born at home with birth weight around 3000 gm. He had no medical problem at or immediately after birth. Umbilical cord had fallen 5 days after birth. On day 7 of life, the parents brought baby with chief complaints of excessive crying and swelling and redness in umbilical region. Physical examination was unremarkable except for omphalitis with erythema and induration around umbilical stump. Few worms were also visible at umbilicus. (Fig. a)

Erythema was extending up to medial side of thigh. Hemogram revealed following findings:

- Hematocrit 52% WBC count of 7800 cells/mm³.
- C-reactive protein was positive immature to total neutrophil (I: T) ratio was 0.5.
- CSF, blood and urine cultures did not show any microbial growth.



Fig. a

Turpentine oil was applied to umbilicus, which resulted in maggots coming out of umbilicus, and the larvae were removed manually (Fig. b). Child was treated with 7 days course of systemic antibiotics and a local antibiotic (fusidic acid) was applied locally to the umbilicus. Tetanus globulin was also administered. USG was done next day to look for any residual maggots in umbilicus. The child was discharged after seven days.



Fig. b

DISCUSSION

Myiasis is a disease of severely ill humans, living in poor sanitary conditions. Neonatal myiasis is still rare

disease, most of which were otic and oral. Umbilical myiasis is extremely rare.

Till date, there has been two case reports of umbilical myiasis from India^{4,5}. The only other report of umbilical myiasis was a neonate in Argentina⁶.

Human myiasis occurs when housefly lays eggs in warm, moist place (here umbilicus). Each female fly can lay around 500 eggs⁷. Within a day, larvae hatch from these eggs. These larvae feed on dead and decaying organic material. They live for around 1 week, when, at the end of third instar, maggots crawl out to a cool, dry place to transform into pupae, from which adult flies emerges. Umbilicus was the accidental but perfect site for the developing larvae.

Myiasis is common in people living in poor, unhygienic conditions, favoring breeding of flies⁵. Reports of human myiasis have reduced with improving living standards. It is rare in newborn as they are completely covered with only face exposed, and are always indoor. Direct contact of newborn and fly does not occur. Occurrence of this rare disease is indicator of poor personal hygiene in our community. There was history of raising livestock at home and open defecation, both of which could have been predisposing factors for myiasis. With Indian government giving stress on building toilets and cleanliness, we may hope that human myiasis becomes a disease of yesteryears.

AUTHORS CONTRIBUTION

Dr. Suresh Goyal: guided in writing manuscript and did final revisions in manuscript to present form.

Dr Komal Agrawal first reported the disease and identified the rarity of condition. She was also involved in writing manuscript.

Dr. Anuj Dhyani edited the article and searched for references. All were involved in treating the patient.

CONFLICT OF INTEREST: None

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